

REMARKS

The Office Action dated November 3, 2003 has been received and carefully noted. The above amendments and following remarks are submitted as a full and complete response thereto.

Claim 10 is pending. Claim 10 is amended and claim 11 is added. No new matter is added, and claims 10 and 11 are supported throughout the Specification, for example, on pages 16 and 17.

Claim 10 is rejected under 35 U.S.C. § 102(b) as being anticipated by JP 10-008101 to Matsukawa et al ("Matsukawa"). Applicants respectfully traverse this rejection.

The Office Action admits that the Matsukawa reference is silent with respect to the percentage of the surface area occupied by the surface. In making the anticipation rejection, however, the Office Action asserts that the claimed invention and the prior art utilize identical compacting processes, and therefore, the percentage of openings on the surface is inherently the same.

It is respectfully submitted that the surface opening percentage of 10% or less is not inherent to Matsukawa, and therefore presently amended claim 10 is not anticipated by Matsukawa. In particular, the surface opening percentage is generally variable under the method disclosed in Matsukawa.

In contrast, Applicants note the surface opening percentage is controlled in the present invention. It is therefore noted that the percentage of surface openings cannot be inherent.

Applicants further note that the diameter of the openings varies from 0.05 mm to a lesser value in the present invention. However, the number of openings on each oil-bearing having a specific diameter is not specified, in either the reference or the present invention as recited in amended claim 10. For instance, the oil-bearing may have a variable amount of openings that are 0.05 mm and a variable amount of openings with other openings with diameters not exceeding 0.05 mm. Logically then, having a high number of openings of .05 mm in diameter versus openings of 0.01 mm in diameter, for example, could result in a larger percentage of surface openings in the bearing having .05 mm openings. The Matsukawa reference does not control for this variability. Thus, the method disclosed in the reference would not necessarily produce a sintered ball having a percentage of surface openings constituting 10% or less of the surface area, as specifically recited in claim 10.

Furthermore, the Specification of the present invention supports the fact that the surface opening percentage is not inherent. For instance, the Specification (page 11, paragraph 20) states that the surface opening percentage is "usually 20% - 30%" and is specifically "reduced to 10% or less" in the present invention. This range lends support to the fact that the surface opening percentage is variable and not inherent. Moreover, the table on page 20 of the Specification appears to provide three test pieces of the inventive article having variable surface opening percentage. This variability demonstrates that surface opening percentage is not inherent.

Applicants therefore respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(b).

Claim 10 is rejected under 35 U.S.C. § 103(a) as being anticipated by

Matsukawa in view of U.S. Patent 5,704,718 to Mori et al ("Mori"). Applicants respectfully traverse this rejection.

The Office Action contends that Mori teaches or suggests the percentage of area occupied by the surface openings.

Mori discloses an oil-impregnated bearing having concave and convex portions, wherein the surface porosity of the concave portions is in the range of 0% to 10% and the surface porosity for the convex portions is in a range of from 5% to 25%. It appears that Mori at best only teaches or suggests a bearing surface in which a portion is limited to 10% porosity. In contrast, the present invention claims an oil-bearing in which the percentage of surface openings over the entire surface area is 10% or less.

Applicants respectfully note that the present claims require maintaining a surface area of 10% or less. By doing so, the present invention has resulted in more advantageous properties that were otherwise not known in the prior art. For instance, in the Specification on page 22, the inventive article TP 2, which has a surface opening percentage of 10% or less, has a lower range of shaft deflection than TP 1. Such unexpected results achieved by the present invention are nowhere taught or suggested by either Matsukawa and Mori, alone or in combination. Applicants therefore respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a).


In view of the foregoing, reconsideration of the application, withdrawal of the outstanding rejections, allowance of claims 10 and 11, and the prompt issuance of a Notice of Allowability are respectfully solicited.

If this application is not in condition for allowance, the Examiner is requested to contact the undersigned at the telephone listed below.

In the event this paper is not considered to be timely filed, Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, **referencing docket number 100725-00068.**

Respectfully submitted,

ARENT FOX KINTNER PLOTKIN & KAHN PLLC



Richard J. Berman
Attorney for Applicant
Registration No. 39,107

Customer No. 004372
1050 Connecticut Avenue, NW, Suite 400
Washington, DC 20036-5339
Telephone: (202) 857-6000

RJB/RKC/RN:ksm

Enclosure: Petition for Extension of Time (two months)